

# ECOSYSTEM PROTECTION: IMPACTS FROM FISHING ACTIVITIES

## ACTION PLAN SUMMARY

### GULF OF THE FARALLONES NATIONAL MARINE SANCTUARY

#### ISSUE STATEMENT

The sanctuary does not fully understand the impacts fishing activities may have on marine wildlife, habitats, and ecosystem dynamics in the Gulf of the Farallones. The sanctuary needs to investigate the impacts from trampling and harvesting of invertebrates in the intertidal; gear impacts on habitats and living resources; and impacts on trophic levels from localized depletion of bait fish and region-wide declines in fish populations.

#### OUR GOAL

To maintain an abundance and diversity of native marine, estuarine, and intertidal species through understanding the impacts from fishing activities on sanctuary resources, and to allow for fishing that is compatible with ecosystem protection.



Photo: R. Allen

#### BACKGROUND INFORMATION

The sanctuary's variety of habitats, including intertidal mudflats, estuaries, rocky shorelines, and deeper subtidal areas, support diverse and abundant fish and invertebrate populations. Large concentrations of burrowing organisms such as clams, snails, and crabs live in the intertidal mudflats. The shallow, protected waters of the bays and estuaries provide critical habitat for salmon, herring, and several species of perch and flatfish. Large populations of rockfish –more than 50 species– inhabit deep-water rocky banks, whereas sablefish and flatfish such as sole, sandab, and halibut live on offshore soft-bottom habitats. Concentrations of sardines, northern anchovies, and krill also live in the sanctuary.

Recreational fishermen primarily have targeted king (chinook) salmon, Dungeness crab, rockfish, and clams in the sanctuary. The commercial harvesters have targeted Pacific herring, salmon, rockfish, Dungeness crab, prawn, and shrimp.

# THE JOINT MANAGEMENT PLAN REVIEW (JMPR)

Ecosystem Protection: Impacts from fishing Activities is one of the action plans in the GFNMS Draft Management Plan (DMP). The DMP includes five action plans that, once finalized, will guide sanctuary management for the next five years. The plan is a revision of the original management plan, developed when the sanctuary was designated in 1981, and is focused on how best to understand and protect the sanctuary's resources. The National Marine Sanctuary Program (NMSP) is updating the management plans for Cordell Bank, Gulf of the Farallones, and Monterey Bay national marine sanctuaries in what is known as the Joint Management Plan Review.



## GULF OF THE FARALLONES NATIONAL MARINE SANCTUARY

Designated in 1981, Gulf of the Farallones National Marine Sanctuary spans 1,279-square-miles (966 square nautical miles) just north and west of San Francisco Bay, and protects open ocean, near-shore tidal flats, rocky intertidal areas, wetlands, subtidal reefs, and coastal beaches within its boundaries.

Food-rich sanctuary waters teem with life: fish, invertebrates, seabirds and marine mammals thrive here. The sanctuary contains thirty-six marine mammal species, as well as twenty-six federally listed endangered or threatened species. White sharks and endangered blue and humpback whales migrate here seasonally to feed, and the Farallon Islands host the largest concentration of breeding seabirds in the contiguous United States.



## ACTION PLAN

The sanctuary's Ecosystem Protection: Impacts from Fishing Activities Action Plan was developed jointly with a variety of local fishermen, fisheries experts, and conservation partners and includes, but is not limited to, the following components:

- Develop a resource characterization of the sanctuary to better understand types and distributions of habitats, species, and processes.
- Develop a socioeconomic profile of fishing activities and communities in and adjacent to the sanctuary.
- Evaluate impacts from fishing activities on sanctuary resources by developing a definition for "compatible use," as well as a "compatibility index."
- Develop policy recommendations or management action(s) to address impacts from fishing activities on sanctuary resources.
- Develop public awareness about the value and importance of the historical and cultural significance of maritime communities and their relationship and reliance on healthy sanctuary waters.
- Establish consistent and coordinated region-wide sanctuary representation at the Pacific Fisheries Management Council and Fish and Game Commission meetings.
- Work with Cordell Bank and Monterey Bay National Marine Sanctuaries to develop a recommendation made to the Pacific Fisheries Management Council to address impacts on marine ecosystems in and around sanctuary waters from krill harvesting.
- Develop a resource protection plan (zonal plan) to minimize user conflicts and provide special areas of protection for sensitive habitats, living resources, and other unique sanctuary features.
- Create a standing "Living Resource and Habitat Protection" working group to provide advice to the sanctuary on ecosystem protection issues.
- Develop strategy to protect habitats that are known to be "special areas of concern."

## TO GET INVOLVED

GFNMS welcomes your ideas about important resource management issues in the sanctuary. A Draft Management Plan and Draft Environmental Impact Statement are scheduled for release to the public in 2006. Following their release, hearings will be held in several locations throughout the region to gather public comment. Written comments will be accepted as well. To find out about public hearings, or how to submit written comments, please visit our website at <http://sanctuaries.noaa.gov/jointplan>.